

REMARKS

Claims 1-16 are pending in the application.

Claims 1-7 and 9-16 are rejected.

Claim 8 is objected to.

Claims 1-4 and 10-16 are rejected under 35 U.S.C. 102(b).

Claims 5-7 and 9 are rejected under 35 U.S.C. 103(a).

Claim 12 is cancelled in favor of amended claim 10.

Claims 1, 5, 8, 10 and 16 are amended.

No new matter is added.

Claims 1-11 and 13-16 remain in the case for consideration.

Applicant requests reconsideration and allowance of the claims in light of the above amendments and following remarks.

Claim Rejections – 35 U.S.C. § 102

Claims 1-4 and 10-16 are rejected under 35 U.S.C. 102(b) as being anticipated by Chang et al. (US Pat. 6,180,454, hereinafter Chang).

Applicants respectfully traverse the rejections.

The Examiner states that Chang, et al. ("Chang") anticipates claims 1-4 and 10-16. Specifically, the Examiner states that Chang teaches forming a polysilicon layer (second poly layer/poly 2/control gate) on a semiconductor substrate; forming an amorphous silicon capping layer on the polysilicon layer (col. 5, lines 34-46); and depositing a silicide layer on the capping layer. In particular, at col. 5, lines 34-36 of Chang, it is stated that "the *term* poly 1 (or poly 2) includes both amorphous silicon layers and polysilicon layers."

Applicant respectfully submits that, however, col. 5, lines 34-36 of Chang merely mean that poly 1 or poly 2 may be formed as *either* amorphous silicon layer or polysilicon layer. In this respect, please note that the use of the word "term." The above description of Chang does not state that poly 2 *itself* includes both amorphous silicon layers and polysilicon layers. Such interpretation is consistent with the description of Chang regarding how the poly 1 layer 44 or poly 2 layer 48 is formed.

That is, at col. 9, line 66-col. 10, line 8 of Chang, it is stated that "a phosphorus in situ doped amorphous silicon layer is deposited via LPCVD Alternatively, a doped polysilicon layer may be formed as the poly 1 layer." Please note the use of the word

"Alternatively." It is *not* stated that a doped polysilicon layer is *additionally* formed on the amorphous silicon layer or similarly.

Also, it is stated at col. 10, lines 31-39 of Chang that "a poly 2 layer is formed in any suitable manner. Specifically, a phosphorus in situ doped, amorphous polysilicon layer is formed via CVD to form a poly 2 layer 48. In this connection, the poly 2 layer may *alternatively* contain polysilicon." Again, please note the use of the word "alternatively." Nothing here teaches or suggests that "forming an amorphous silicon capping layer on the polysilicon layer," as recited in claim 1, 5 and 10.

In contrast, in the claimed invention recited in claims 1, 5 and 10, an amorphous silicon capping layer is formed on a polysilicon layer, the two layers being *separate and distinct* from each other. Method claims 1 and 5 are amended to further emphasize this point by reciting that the amorphous silicon capping layer is formed *after* forming the polysilicon layer. Also, claim 10 has been amended to recite the capping layer as amorphous silicon, further emphasizing the points made above. No new matter has been added. Support for these amendments can be found, among other places, in the Specification, page 8, lines 19-20.

For these reasons, Chang does not teach the above structural relationship or limitations of the claimed invention for the reasons discussed above.

Therefore, for at least these reasons, applicant respectfully submits that claims 1, 5 and 10 are distinguishable over the prior art and are not anticipated by Chang. Withdrawal of the rejections is respectfully requested.

Claims 2-4 depend from claim 1 and inherently include all of the limitations of the base claim. Claims 6-7 and 9 depend from claim 5 and inherently include all of the limitations of the base claim. Claims 11 and 13-16 depend from claim 10 and inherently include all of the limitations of the base claim. As discussed above, the prior art does not teach the limitations of these base claims much less the further embodiments of their respective dependent claims. Therefore, claims 2-4, 6-7, 9, 11 and 13-16 are allowable for their dependency and their own merits. Allowance of these claims is requested.

Claim Rejections – 35 U.S.C. § 103

Claims 5-7 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chang (U.S. Pat. 6,180,454) in view of Oka, et al. (U.S. Pat. 6,235,563, hereinafter Oka).

For the reasons discussed above, the cited references, either alone or in combination, do not teach or suggest all of the limitations of claim 5-7 and 9. Accordingly, the rejection does not present a *prima facie* case of obviousness, and these claims are allowable.

Allowable Subject Matter

Claim 8 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.


Claim 8 is amended to include all of the limitations of its prior base claim 5 and the intervening claim 7. Claim 8 is now in condition for allowance.

In conclusion

For the foregoing reasons, reconsideration and allowance of claims 1-11 and 13-16 of the application as amended is solicited. The Examiner is encouraged to telephone the undersigned at (503) 222-3613 if it appears that an interview would be helpful in advancing the case.

Respectfully submitted,

MARGER JOHNSON & McCOLLOM, P.C.


Hosoon Lee
Reg. No. 56,737

MARGER JOHNSON & McCOLLOM, P.C.
1030 SW Morrison Street
Portland, OR 97205
503-222-3613
Customer No. 20575

I hereby certify that this correspondence
is being transmitted to the U.S. Patent and
Trademark Office via facsimile number
(703) 872-9306 on May 17, 2005.


Stormi R. Davis